Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Fostering Innovation and Investment in the Wireless Communications Market	)	GN Docket No. 09-157
	)	
	)	
A National Broadband Plan For Our Future	)	GN Docket 09-51

To: The Commission

COMMENTS OF MOBILE FUTURE

As the Commission embarks on its efforts to better understand the factors that encourage wireless innovation and investment, Mobile Future submits the attached white paper, "Welcome to the Mobile Future, How Wireless Innovation is Transforming Our Economy & Our Lives."[1] Mobile Future is a broad-based coalition of businesses, non-profit organizations and individuals interested in and dedicated to advocating for an environment in which innovations in wireless technology and services are enabled and encouraged. The white paper outlines how the public sector and innovators in the wireless space have collaborated and cooperated over the past twenty-six years to deliver on the promise of multiple, mobile friendly choices for all consumers. In addition, per the Commission's request, this paper provides data and an historical context to help inform the FCC's identification and analysis of the factors that facilitate innovation and investment in wireless.

[1] *See* Fostering Innovation and Investment in the Wireless Communications Market; A National Broadband Plan For Our Future, FCC 09-66 *Notice of Inquiry*, (rel. Aug 27, 2009).

Absent an understanding of the regulatory decisions that have fueled the breakthrough moments in wireless history, this Commission will lack the context to chart a path that continues to encourage innovation and investment.[2] The watershed event for America's mobile consumers was in 1992 when Congress amended the Communications Act to give the FCC the power to use auctions as a way to get spectrum most quickly into the hands of entities that had the financial, technical and business expertise to build and operate mobile networks. This came after years of the FCC trying to achieve this same goal via other methods. The 1992 amendments to the Communications Act also charted a clear regulatory path for the industry that refrained from engaging in economic regulation and afforded the engineers and other experts maximum flexibility to design and build the wireless networks of tomorrow. The Commission wisely implemented the Congressional mandate consistent with its purpose – establish a baseline of consumer protections, put the consumer in the driver seat and allow the engineers who know how to build networks and the investors interested in funding them to come together and build a business. This extraordinary attempt by policymakers to break from their typical utility-style approach to regulating telecommunications was a study in legislative and regulatory bravery, and American wireless consumers have been the direct beneficiaries. This approach has proved so successful in fact that it has been duplicated by regulators across the globe.

The attached white paper makes clear that mobile wireless services are capable of giving consumers, public and private, innovative ways to solve real world problems. For example, in the public safety arena, a broadcast emergency alert service is being

[2] *See Id* at ¶11.

developed that can issue warning messages to every cell phone in a predetermined geographic area. In the health care arena there is a mobile application that reminds patients to take their necessary medications, thereby preventing the need for additional doctor visits and hospitalizations. In Arkansas, students are given laptops or video iPods so they can take online courses during their long bus rides to and from school. And the use of wireless technologies in Smart Grids helps control and eliminate waste in our energy grids. Each of these innovations is representative of the network innovation that supports thousands of new capabilities, applications and devices that are in turn being utilized and implemented daily throughout the country. Wireless innovation at the core, the edge and in between is flourishing.

Mobile Future believes that there are four fundamental policy cornerstones that will continue to expedite and catalyze the innovation, investment and job growth wireless has generated for this country and its citizens in the last 20 years. First, it is critical not to scare private investment away from this sector. Additional dollars are needed to bring 4G network capabilities to Americans at prices they can afford. Second, innovation should be consumer driven, not government mandated. Third, recognize the critical role mobile innovation can play in promoting broadband access. And fourth, continue to broaden the community of stakeholders engaged in promoting mobile innovation. As is pointed out in the attached white paper, we are living in the mobile future anxiously anticipated in the 1990s. Today's challenge is to accurately chart the course for the 21st century to ensure ongoing mobile success.

Respectfully submitted,

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MobileFuture
Wireless. Innovation. Freedom.

WELCOME
to the
MOBILE FUTURE

How Wireless Innovation is Transforming Our Economy & Our Lives

Mobile Future is a broad-based coalition of businesses, non-profit organizations and individuals interested in and dedicated to advocating for an environment in which innovations in wireless technology and services are enabled and encouraged. Our mission is to educate the public and key decision makers on innovations in the wireless industry that have transformed the way Americans work and play and to advocate continued investment in wireless technologies.

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One Nation: Connected and Free

People with diabetes test their blood sugar and the results are wirelessly transmitted to their health care providers, who return timely, customized feedback. School children are given connected netbooks that allow them to access any resource—from home, the classroom or anywhere in between. Citizens in Iran take up their cell phones and broadcast to the world images of a repressive regime. Minorities, seniors and others too often left behind are turning to mobile devices to cross the digital divide and access the opportunities of the Information Age. Welcome to the mobile future.

We all agree that wireless is successful. In this paper, we ask the question: Why? What key decisions enabled the rapid rise of this profound, ubiquitous platform for innovation, economic growth and a more informed and connected world?

The U.S. wireless sector leads the world today because consumers and innovation have shaped its rapid evolution. Along the way, policymakers from Congress to the Federal Communications Commission, the White House to state capitals, have struck a powerful balance—protecting consumers and nurturing the rapid emergence of a robust, competitive and innovative mobile ecosystem through a light-touch regulatory approach.

The results so far have been extraordinary. Nearly 90% of American adults have a mobile device, [1] and virtually all of us keep them within arm's reach 24 hours a day [2]. Choices of plans have increased and consumer value has soared as people do far more with their mobile phones—from texting to video to surfing the Internet—all for about the same price as basic wireless service in the early 1990s.

The wireless sector's success is a model for the 21st century—powerfully demonstrating what a collaborative approach between consumers, policymakers and a competitive and innovative industry can achieve for the nation.

THE STORY SO FAR

BREAKTHROUGH MOMENTS IN WIRELESS HISTORY

From policymakers to technology innovators to the demands of consumers in the marketplace, the extraordinary success of the U.S. wireless sector has many contributors—all playing key roles in advancing innovation for consumers.

Throughout the 25+-year wireless evolution, the government has taken a balanced approach that protects consumers and has fueled more than $325 billion in capital investment in the domestic wireless infrastructure. At the same time, innovation has unfurled at a rapid pace, guided by the relentless pressure to "one up" competitors and to continually "wow" consumers.

The wireless industry today employs nearly 2.7 million Americans—from applications developers to retail store workers to network engineers. [3] And the industry contributes an estimated $100 billion annually to the U.S. GDP. [4]

This rapid evolution and growth of wireless innovation offers a prime example of 21st century collaboration between innovators and public servants to advance the national interest.

Here are some key milestones along the journey so far.

The Death of Distance

2.2 FAST FACT: *trillion — number of minutes Americans spent talking on their mobile phone in 2008.*[5]

Many of us remember the days when a long-distance phone call was a rare household event. Costs were high. Conversations were brief. And, the news that someone was "calling long distance" would ignite a flurry of activity to locate the call recipient, who would then sprint for the phone. Time, after all, was money.

Very early in its evolution, wireless changed all of that—answering consumers' call for a more affordable way to stay in touch with loved ones no matter where they lived. From buckets of minutes to free nights and weekends to friends and family plans, wireless providers developed new consumer choices for their service plans and the results were nothing short of revolutionary.

Consumers began making their long-distance calls from their wireless phones, rather than their landlines. Eventually landlines, too, were forced to change their business models and offer unlimited calling plans. To this day, competition not only between wireless providers, but also with landline providers is cutthroat.

Today, whether it's Mother's Day or simply a slow afternoon, we think nothing of calling across the country to catch up with loved ones. Best of all, consumers haven't paid a dime more for this extraordinary step into virtually limitless communications. Since 2001, the average price of a wireless plan remains about $50, even though we spend about 2.2 trillion minutes each year talking on the phone (not to mention texting and surfing the Internet)—compared to 500 billion in 2001. [6] Now that's reaching out and touching someone.

The FCC Fosters a Competitive Industry

When the wireless industry first came to fruition, many believed it would be nothing more than a niche market. How many people, after all, would carry around a phone? (In their defense, early models were the size of a brick or hardwired into vehicles). This underscores a recurring theme in U.S. innovation policy—conventional wisdom "at the time" is often incorrect.

95% *FAST FACT:*
U.S. population with three or more wireless service choices. [7]

With this shortsighted view that spectrum was relatively worthless, it was first suggested that this tremendous resource simply be handed over to incumbent telephone companies. Ultimately, the FCC focused on a competitive model—deciding there should be at least two providers in each service area. Then in the late 1980s, the Commission allowed a company called Fleetcall (later Nextel) to interconnect, creating another competitor. In the mid-90s, the FCC conducted a nationwide spectrum auction that granted six additional licenses per market.

With competition squarely in place, the FCC resisted heavy regulation, choosing instead to empower companies to respond directly to consumers. As a result, companies offered bundles of minutes and nationwide roaming plans. Texting, too, offers a prime example of consumer-led innovation. Early conventional wisdom dismissed texting as a fad. Who, after all, would want to type on such tiny keyboards? Traditional telecom regulations would require companies to convince the FCC of the merits of this new service. This could lead to years of inquiries, filings and legal challenges. Instead, companies simply offered their product to consumers, and the rest is history. Last year, Americans sent 1 trillion texts, and companies now offer unlimited texting plans, clearly demonstrating that consumers and competition are guiding this marketplace. [8] The FCC's decision to enable competition and allow companies to respond directly to consumers is a driving force of American wireless innovation.

Congress Promotes Wireless Innovation

2.7 *FAST FACT:* ***Million Americans work in the U.S. wireless industry.*** [9]

Another significant early catalyst in the development of the wireless industry was the recognition by policymakers of mobile's vast potential—and a broad understanding that legacy regulations would impede this promise.

From its inception, the FCC set up wireless to be competitive in each market. In 1993, Congress recognized the merits of this approach and embraced a uniform federal regulatory framework. This further ignited broad investment, competition, innovation and a cell phone in virtually every pocket. This high-vigilance, light-touch approach has been maintained under Democratic and Republican leadership. The results so far? More than $325 billion in infrastructure investment [10] and game-changing progress for our economy, health care, education, public safety and beyond.

Where there are important social goals that require all companies to take action, the government has engaged in targeted interventions. For example, the FCC requires all mobile phones to have advanced 911 capabilities. It also ensures consumers have the option to take their phone numbers with them if they change providers.

The regulatory framework established in 1993 recognizes that wireless knows no geographic boundaries and requires a coherent national framework. It also retains an important role for states, safeguarding consumer protections and encouraging competition in rural areas by directing universal service support. The government's decision to forgo expansive regulation facilitated the rapid rise of this industry. Consumers and our economy are reaping the benefits, and this collaboration offers a 21st century roadmap for public-private innovation.

Historic Private Sector Infrastructure Investment

Just as consumers think nothing of picking up their mobile device and calling across the country, so do we take for granted our ability to use our phones from virtually any location. But it was hardly effortless to achieve a robust, nationwide, interoperable infrastructure. Once again, government and private industry worked constructively together to achieve this landmark goal.

$325 *FAST FACT:*
billion — estimated investment so far from U.S. companies in the nation's wireless infrastructure.

Congress established a pro-investment stance. The FCC used its spectrum authority to create a competitive industry. Competing wireless companies raced to deliver the best service, collectively investing over $325 billion in networks, spectrum and other capital projects to build the world's most sophisticated and robust wireless infrastructure. As a result, consumers have the ability to access networks from virtually anywhere. Whether you subscribe to a large nationwide carrier, choose a small regional carrier or purchase pre-paid service from a 7-Eleven, your wireless experience is as seamless in Lincoln, Nebraska as it is in mid-town Manhattan.

This constructive framework has triggered accelerating investment, first moving the nation from analog to digital and then progressing from 2G to 3G networks, with 4G on the horizon. This ongoing investment has substantial implications as policymakers seek to bring broadband to remote parts of our country and underserved populations. Demand also will increase exponentially with more widespread use of video, which requires a great deal more capacity. From real-time video conferencing with doctors to catching up on the local news—video will drive the next great surge in demand on our infrastructure. Fortunately, providers are rising to the challenge, investing aggressively in next-generation networks that can deliver speeds comparable to today's wireline networks.

Your Device, Your Way

The U.S. has the most innovative and competitive wireless device market in the world, with more than 30 manufacturers offering more than 600 choices to consumers. The release of a new handset is a pop culture event, with lines around the corner at retail stores and a flurry of chatter online, in the media and at kitchen tables across the country. What makes it all tick? Competition.

FAST FACT:

630 *number of mobile devices available to U.S. consumers.*

147 *number of mobile devices available to UK consumers.*

Device makers and wireless providers work collaboratively to "one-up" each other with innovative applications, tools, service and style. The range of prices suits every budget, and exclusive contracts allow these devices to reach consumers more quickly and at steep discounts, often 50% off the retail price.

The sky's the limit as to what these modern devices can do. As handsets evolve into full-fledged, handheld computers, continuing the eye-popping innovation requires carriers and developers to work closely together, sharing proprietary information to create a seamless, unique and high-quality consumer experience.

There also are practical reasons why handset partnerships are commonplace. It cost about $150 million to create the iPhone. Partnerships allow a wireless provider and device maker to share the risk of developing and marketing a new product—driving both to deliver the highest-performing device to consumers.

And, the innovation continues. A number of new handsets are anticipated this year based on Google's Android operating system. Under this model, manufacturers create devices based on a common set of specifications. Many service providers are expected to support these devices—bringing further diversity and choice to the marketplace.

Consumers Call the Shots

In the U.S. wireless market it's not content or technology that's king—it's the consumer. Whether offering consumers more bang for their buck or a more diverse range of devices, features and plans, wireless companies always respond to consumer demand and will continue to do so. Why? Because customer responsiveness drives the wireless sector's continued success.

FAST FACT:
1 trillion — number of text messages sent in the U.S. in 2008.

From unlimited calling and texting, to pro-rating early termination fees to allowing customers to change service plans without extending their contract, consumers have a big say in how the market evolves. Consumers even brought about "no-contract" service options. Competitors leaped to respond to demand, and today an estimated 20 million Americans use pre-paid calling services. [11]

Thanks to the policy framework established by Congress and the FCC, the competitive marketplace is free to respond to consumer demand. The result is unprecedented consumer satisfaction and economic growth. According to a June 2009 study by the U.S. Government Accountability Office, 84% of Americans are "very or somewhat satisfied" with their wireless service. And, the Pew Internet and American Life Project finds that most tech-savvy Americans would have a harder time giving up their mobile device than their TV, Internet or email (probably because they can get all three wirelessly). [12]

The wireless sector thrives by delivering greater value to more people. Americans pay among the lowest rates in the world. Revenue per minute has declined nearly 90% since 1994. [13] And, we like a bargain: Americans use almost twice as many minutes per month (829) as the second most talkative country (Hong Kong). [14]

The World's Most Competitive Marketplace

The cumulative effect of consumer-driven innovation and constructive, light-touch regulation? The world's most competitive wireless marketplace. Among all Organization for Economic Cooperation and Development nations, U.S. consumers have the most wireless choices. In fact, a full 95% of the population has three or more wireless choices, and 60% of the population has at least five options. [15]

89% *FAST FACT: the reduction in price per minute of use for U.S. wireless consumers since 1994.*

With competition in such rich abundance, it's no surprise that U.S. consumers have the lowest prices per minutes of use of any OECD nation. And, consumer choices continue to expand all the time. Cox Communications has announced the most ambitious plan to date from a U.S. cable provider to enter the wireless market. The company has invested $500 million in wireless capacity and expects to launch service in the second half of 2009. [16] Clearwire Communications, with substantial strategic backing from cable players, Google and others, is rolling out high-speed Internet service offerings over 4G wireless networks to businesses and consumers. The venture plans to reach 80 markets by the end of 2010. MetroPCS Communications is among the fastest-growing wireless companies, offering unlimited calling plans with no contract for as low as $30 in the top 25 U.S. markets. Leap Wireless also is finding similar success with its Cricket and Jump brands, which cater to diverse urban and suburban consumers in 29 states.

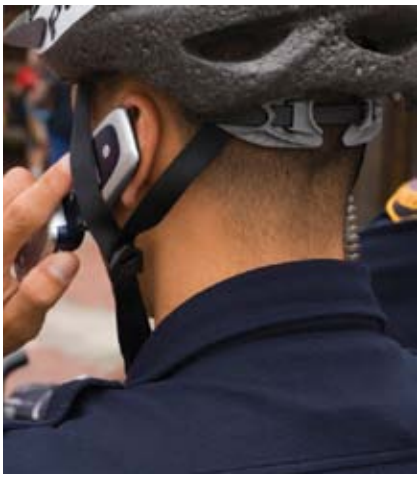
With its robust infrastructure and rapid, competition-fueled innovation, U.S. wireless is the envy of the world. Companies invest, innovate and compete—and consumers reap the benefits, moving easily from one provider to another, as they choose the company that provides the right combination of value, innovation and services for their unique wireless lifestyle.

Wireless & Public Safety

Through both man-made and natural disasters, wireless networks have demonstrated time and time again their resilience and robust ability to restore communications in a timely manner and keep the public informed and safe.

91% FAST FACT: of wireless Americans keep their mobile device within arm's reach 24 hours a day.

The government turned to wireless networks in the pivotal hours following the 9/11 attacks to maintain essential communications and assist first responders. With Hurricane Gustav, providers were able to quickly roll in "cell on wheels" infrastructure to add capacity and aid recovery efforts. Providers also anticipate demand surges, for example, rolling in extra infrastructure to the nation's capital in advance of President Obama's historic inauguration.



From 911 capabilities to mobile AMBER alerts to connecting firefighters as they battle a blaze, wireless plays a pivotal public safety role. Last December, there were nearly 300,000 calls per day placed to 911 from a cell phone—allowing citizens to seek help in a way not possible a few short years ago. [17] In cities like Chicago, wireless technology can even activate public safety cameras in the vicinity of a 911 call, giving first responders a potentially life-saving vantage point.

From farmers working in their fields to citizens in urban settings emailing photos to law enforcement from their mobile devices, wireless is a lifeline. And, the industry is hard at work developing cell broadcast emergency alert services that can issue warning messages to every cell phone in a geographic area—issuing timely and potentially life-saving information as an emergency situation unfolds.

Rise of the Smartphone

The mobile future isn't about phones. It's about connecting to friends, family, information, entertainment and resources around the globe—instantly and from anywhere. While the nation focuses on delivering broadband to every home, the mobile future promises broadband to the person. How? Well, our phones aren't just for talking anymore. They're getting a lot more sophisticated—and smart.

FAST FACT:

African Americans are the most active users of the wireless Internet—and the fastest-growing mobile web population. [18]

Connected "smartphones" marry the convenience of mobility with the virtually limitless resources of the Internet, delivering constant connectivity. From updating our Facebook status to checking in with the office, to paying our bills, we conduct more of our lives not just on the Internet, but the mobile Internet.

Mobile data is the fastest-growing segment of the Internet access market. Think it's all business customers? Think again. Mobile broadband is often the preferred mode of connectivity for Latinos, African Americans, seniors and other diverse communities that too often are left on the wrong side of the digital divide. Sidestepping the cost of a computer and the complexity of installing software, guarding against viruses and other technical barriers, managed wireless networks are showing broad appeal while easing people's transition into the digital world.

Most mobile devices now have basic Internet capabilities, and it is estimated that there will be 500 million smartphones in use around the world by 2012. [19] Today, it's our phones. But increasingly in the mobile future, everything will be connected—from our cars to our medical records to the thermostats in our homes. The possibilities? Endless.

1 Billion Apps & Counting

As these intelligent devices evolve into a personal computer in the palm of your hand, they can do anything from check the weather, to register your heart rate, level a picture and, yes, even place a phone call or send an email.

FAST FACT:
9 months — the amount of time it took from the opening of the Apple App store for the 1 billionth download to be completed. [20]

From customized newsfeeds to music players, there truly is "an app for everyone"—creating a whole new universe of opportunities for garage innovators and expansive choices for consumers. Connectivity plus innovative applications exponentially increases the value of mobile devices, delivering greater convenience and a range of services to consumers. According to *Vanity Fair*, the old "get rich quick" scheme was an IPO. Now, it's developing a popular mobile app. In fact, revenue from mobile applications is expected to exceed $25 billion by 2014. [21] Both high-end smartphones and mass-market handsets will fuel this broad and substantial economic opportunity for diverse mobile innovators.

No less than six app stores now offer consumers nearly 100,000 mobile applications (many available for free).

- Looking to turn commute time into tutor time for your kids? There's a whole universe of apps, such as Wheels on the Bus, that use video games to engage kids and teach age-appropriate math, spelling and other lessons.
- Want to make sure your teen respects your rules and the law and doesn't text while driving? The Textecution app uses a phone's GPS system to disable texting when the device is moving faster than 10 miles per hour.
- Need help remembering to take your medication? There's an app for that.

Of course, you can also just play Hero of Sparta or Bejeweled while waiting at the airport. The *choice* is yours.

Connected Democracy

On election night 2008 in Chicago's Grant Park and across America, millions of mobile devices vibrated in unison—the now-familiar signal of an incoming message. It read: "I'm about to head to Grant Park to talk to everyone gathered there, but I wanted to write to you first…All of this happened because of you. We just made history—Barack." Simple words. Profound history.

64% *FAST FACT:*
of 18- to 35-year-olds relied on digital communications in the 2008 elections, saying it was the easiest way to access and share information. [22]

In the 2008 elections, mobile connectivity helped inspire a groundswell of participation in our democracy by a new generation. It started with a Super Bowl ad asking supporters to text "hope" to 62262 (O-B-A-M-A). That initial mobile connection led to a formidable grassroots community that received a steady stream of information from policy papers to local volunteering opportunities to get-out-the-vote activities. President Obama even announced his Vice Presidential pick via text message.

In office, President Obama is the first American President to fully embrace wireless, waging a now-famous effort to retain his personal wireless device. Best of all, this commitment to broad citizen engagement has carried over into the new Administration, which has demonstrated an unprecedented commitment to using technology to break down the walls between citizens and government.

This is the wireless generation. They have no experience with the world "before." They are reaching out to others in a connected world—with phone calls, email, video—creating communities that know no geographic boundaries. The Internet makes it possible. Wireless makes it part of our everyday lives.

THE NEXT FRONTIER

HOW THE MOBILE FUTURE WILL CONNECT OUR COUNTRY & IMPROVE OUR LIVES

The story so far has been one of rapid adoption, consumer-driven innovation and laying a strong foundation for widespread social progress from health care to education to citizen engagement in our democracy. If consumers and the marketplace continue to guide innovation, then mobile innovation is clearly poised to transform many of the most critical debates before our country today.

Yes, the results so far have been extraordinary, but the best part of the story lies ahead. With a constructive policy framework, the jaw-dropping contributions of diverse innovators and the continued enthusiasm of consumers, the mobile environment is growing richer by the day.

We've only just begun to reap the benefits of the mobile future. Here are six key areas where our world will never be the same:

1 Lifting Communities and Families in Need

The blurring lines between computers and mobile devices are adding up to major strides in broadband adoption, accessibility for underserved populations and fresh economic opportunities for whole communities. Minority communities are turning to their mobile devices to close the digital divide. The same holds true in rural America where wireless networks may be far less costly to deploy than traditional wired infrastructure. With the nation prioritizing broadband deployment and adoption, mobile broadband has a distinct advantage with the relatively low cost of entry and the fact that these networks are managed for consumers, reducing technical barriers such as digital literacy. This could be the wave of the future—affordable, seamless, intuitive and easy-to-use connected devices that anyone

can utilize. Affordable mobile devices, coupled with low-cost, pay-as-you-go service options, also are providing a lifeline to families and individuals bearing the brunt of the current economic crisis. Recent news stories have even documented a rising trend of homeless Americans relying on wireless devices to access food stamp assistance, housing opportunities and jobs.

2 Public Safety

From responses to health pandemics to natural disasters to terrorist attacks, robust and redundant wireless infrastructure will play an increasingly essential role keeping people connected, informed and safe in times of uncertainty. Wireless networks enable broad distribution of timely information to virtually every American—from maps and evacuation routes for civilians to on-site photos and building schematics for first responders. Increasingly, public safety agencies also are relying on commercial mobile services for non-mission critical communication needs. With ongoing innovation, such as cell broadcast technology, the mobile future is connecting us together, giving us all tools to help keep our communities safe and get help when we need it.

3 Health Care

From bringing cutting-edge expertise to rural towns to improving the availability of timely, accurate data bedside to promoting prevention and self-care, wireless innovation will lead the next great revolution in American health care. As our nation takes on the challenge of reforming its health care system—reducing costs while advancing patient care—wireless innovation is key to achieving this seemingly paradoxical goal. Remote monitoring of patients with heart failure alone could save lives—not to mention $10 billion in annual medical costs. From reducing medical errors to sending text messages with tips for new moms, wireless can deliver dramatic results at relatively low costs. There also are a mind-boggling array of mobile applications and devices fast emerging to help us stay healthy. Researchers have designed a phone that analyzes blood for malaria, HIV and other diseases—essentially a mobile hospital in the palm of your hand. Other mobile apps can send messages to users reminding them to take their medication, get vaccinations or pursue testing—helping us all lead healthier lives.

4 Informed Society

Thanks to mobile innovation, information is always at our fingertips. From transparency in government to knowing what's happening around the world, this has broad implications for civil society and our democracy. Mobility's advantage over the home computer is its ability to deliver real-time information to large segments of the population, regardless of location. Information—from the state of democracy in Iran to the score of the local high school football game—is accessible at any time in the palm of your hand. And, increasingly, we will be able to bear witness to events in real-time, not just with text, but with video. Want to do something about what you see and learn? Services are now underway to let you micro-volunteer your time. Standing in line for coffee and have a few minutes to help translate from Farsi to English? Services like the Extraordinaries are happy to take you up on the offer—helping us not only be more informed, but also actively engaged in improving the world around us.

5 Education

Wireless technologies have the potential to help change the way our children learn, from digital textbooks to connecting rural students to the Internet. Studies have shown that students with Internet access do better in school than those without. [23] In May, California Governor Arnold Schwarzenegger announced plans to make his state the nation's first to offer schools free, open-source digital textbooks for high school students. The state also is home to the School2Home Partnership, which provides connected, low-cost netbooks to students in low-income middle schools, allowing them to reap the benefits of wireless Internet both in the classroom and at home. In Arkansas, the Aspirnaut Initiative gives students laptops or video iPods, so they can take online courses during their long bus rides to and from school. Given the fact that 1 in 4 U.S. households lack a personal computer in the home, [24] these initiatives provide a critical gateway to ensuring more Americans have access to all that the Internet has to offer. Schools in minority and low-income communities also are turning to texting to connect with busy working parents to keep them apprised of their children's progress.

6 Energy Efficiency

Wireless technology clearly plays a starring role in the Smart Grid revolution that could reduce our electricity use by 30%. [25] Rather than dumb utility pipes, these intelligent systems help eliminate the rampant waste in our energy grids, helping ease the impact on our environment—and our monthly energy bills. Applications also are emerging to help us all understand and more efficiently manage our home energy, as well—from letting us see how our various household activities use energy to allowing us to remotely activate the thermostat as we head home from work. Mobile innovation also enhances our environment and work/life balance. More people working from home or on-the-go reduces freeway time, air pollution and the need for new office development.

WHAT IT TAKES

THE CORNERSTONES OF A 21ST CENTURY MOBILE INNOVATION POLICY

As American society and our economy prepare for the next wave of explosive innovation in mobile and wireless technologies, now is the time to reflect carefully on what got us here: a vigilant, light-touch regulatory approach, profound private sector risk-taking and investment as well as aggressive innovation by an increasingly diverse mobile ecosystem—all guided by the enthusiasm, input and demand of consumers.

Looking ahead, what can we do to unleash the next wave of innovation—advancing health care, education, public safety and the environment, while lifting communities and encouraging full participation in the digital age?

Particularly as we enter the broadband era, there is a moment of choice before our nation: Do we facilitate, expedite and catalyze innovation, investment and job growth or stifle it?

Here are four foundational policy cornerstones that can help unleash the mobile future.

1 Strong Infrastructure

The value, choice and seamless service Americans enjoy today leaves the impression that these networks just happen. To the contrary, it's a collective effort among those willing to take substantial risk investing hundreds of millions of dollars to build these networks, the entrepreneurs who create innovative devices and applications that make these networks valuable in our daily lives, and government policies that have encouraged and ensured this ongoing progress.

2 Consumer-Driven Innovation

The constructive policy framework established by Congress and the FCC laid the essential foundation for all of the wireless innovation, investment and choice we enjoy today. Consumers

have choices from service plans to devices to providers and beyond. The marketplace has marched inexorably forward with broad innovation and historic investment levels, all guided by 270 million wireless consumers. Continuing to allow innovators to respond directly to the marketplace is key to the next-generation of progress. Just imagine the implications to health care alone. When the market is competitive, and the service is automatically allowed, new products and services quickly emerge.

3 Promoting Broadband Access

Mobile innovation can play a defining role in the success of efforts to stimulate the U.S. economy by encouraging more ubiquitous broadband. Mobile can help overcome significant barriers to broadband adoption, such as the cost and complexity of computer ownership. It can also provide innovative and cost-effective solutions for reaching remote rural areas that have proven uneconomic to serve through traditional wireline infrastructure. From avoiding regressive taxes and unnecessary regulations to including wireless as a core component of the national broadband strategy, a balanced and constructive path forward should uphold the bipartisan, competitive framework that has yielded such broad consumer and economic benefits. Before making changes to this approach, policymakers must carefully weigh the likely negative impact on this essential national progress toward universal connectivity.

4 Broadening the Conversation

Mobile innovation increasingly goes to the heart of U.S. economic policy, health care policy, education, public safety and beyond. When we look to the future we need to involve the broader community of stakeholders who are counting on continued innovation and progress to transform our economy—and people's lives. After all, it is a mobile future.

ENDNOTES

1 "Cell Phone Usage Continues to Increase," Harris Interactive, 4/4/2009.

2 Mary Meeker, Web2 Summit, 11/2008

3 Comments of CTIA-The Wireless Association to the FCC regarding Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, 6/2009

4 CTIA-The Wireless Association to the FCC, *Written Ex Parte Communication*, GN Docket No. 09-51, WT Docket Nos. 08-165, 09-66.

5 CTIA Wireless Semi-Annual Survey, 12/31/2008

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